December 29, 1998

MEMORANDUM

TO:

Whitmel H. Webb, P. E.

Programming and TIP Branch Manager

FROM:

Eric J. Lamb, P.E.

Feasibility Studies Unit

SUBJECT:

FS-9913C - US 25 (McDowell St.), Victoria Street Tunnel upgrade in Buncombe

County

At the request of the City of Asheville, the cost of upgrading the Victoria Street Tunnel on US 25 (McDowell St.) was studied. The City requested that NCDOT examine upgrading this tunnel in a fashion similar to improvements completed earlier this year to the Beaucatcher Tunnel on Tunnel Road.

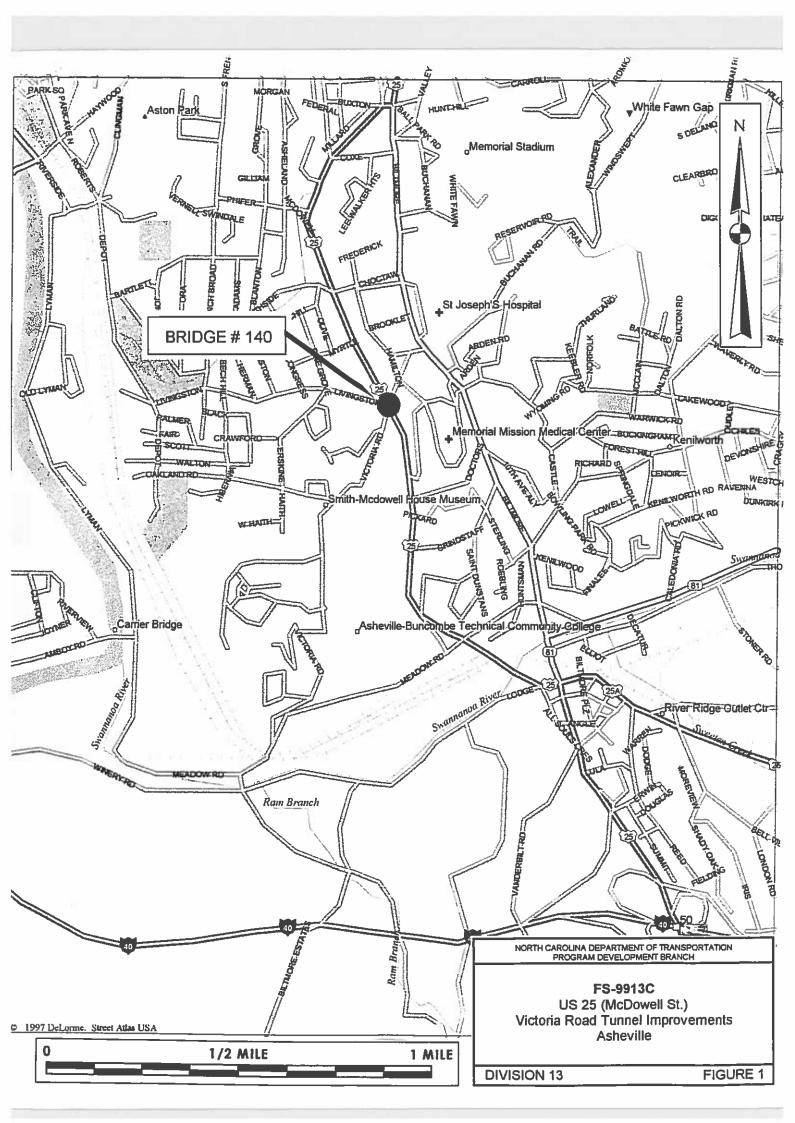
The Victoria Street Tunnel, Bridge No. 140, was constructed in 1927 and is technically a concrete arch culvert rather than a tunnel. Through the tunnel, McDowell Street is a four-lane curb and gutter facility, 40 feet (12.2 m) wide from face-to-face of curbs. There is a 5-foot (1.5-m) sidewalk on the west side of the tunnel and a 5-foot (1.5-m) berm on the east side of the tunnel (see Figure 2). McDowell Street is designated as a major thoroughfare in the Asheville Urban Area Thoroughfare Plan and as a principal urban arterial in the North Carolina Statewide Functional Classification System.

According to Division 13 staff, the stone face added to the Beaucatcher Tunnel cannot be added to the face of the Victoria Street Tunnel as requested by the City due to the nature of the wingwalls. In lieu of this stone face, the City has requested that some type of cosmetic stone veneer be installed to resemble nearby Asheville High School. The cost of this improvement is not included in the construction cost estimate below.

The estimate includes costs for coating the interior of the tunnel with a graffiti-resistant, reflective polyurea as installed in the Beaucatcher Tunnel. Costs are also included for cleaning the existing interior tunnel surface and the exterior wingwalls. Additional costs are included for installing a metal pedestrian handrail along the west side and overhead lighting.

No new right-of-way will be required in order to render these improvements. No impacts to existing utilities are anticipated. The total estimated construction cost of this project is \$700,000.

cc: David G. Modlin, Jr., Ph.D., P.E. - Feasibility Studies Unit Head



BRIDGE No. 140 SPECIFICATIONS NORTH WINGWALLS 25' 200 SHETS EVEN 100 SHEETS EVEN 100 RECYCLED W 200 RECYCLED W 15 12.381 12.382 12.382 12.383 14.383 122' YICTORIA 120. TUNN EL SOUTH WINGWALLS 25 8 15 පුතු NORTH CAROLINA DEPARTMENT OF TRANSPORTATION PROGRAM DEVELOPMENT BRANCH FS-9913C US 25 (McDowell St.) Victoria Road Tunnel Improvements Asheville NOT TO SCALE FIGURE 2 **DIVISION 13**